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OTS 61-11437

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Sci - Phys  
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Sci - Chem  
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\*Engr Res Devel Lab Ft. Belvoir

Sci - Phys

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Sci - Eng Chem  
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Sci - Physical  
Mar 58

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Sci - Phys

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Migration and Transmission of Electron Excitation  
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of Excitations, by V. M. Agranovich, A. N. Faydysh,  
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Photoluminescence and Its Temperature Dependence,  
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AEC/AERE Tr 923

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May 63

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Luminescence Decay Time of Colour Centres in  
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Tishchenko.

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VELOCITY OF A SOURCE OF RADIATION (K Yop-  
rost' ob Obrabotku Rezul'tatov Prynimogo Opyta po  
Proverke Nezavisimosti Skorosti Sveta ot Skorosti  
Istochnika Izlucheniya) tr. by J. Hardy, [1962] 61p.  
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Order from CTS or SLA \$1.10      62-23722

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- I. Bonch-Bruyevich, A. M.
- II. CSIRO Trans-5703
- III. Commonwealth Scientific and Industrial Research Organization (Australia)

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no. 1, p. 141-142.

DESCRIPTORS: \*Light, Velocity, Sources, Probability.  
\*Relativity theory.

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Akad. Nauk SSSR 109: 481, 1955 and Optika i Spektro-  
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On the Basic Electron State of Oxides of Molecules  
of Group II Elements, by I. V. Veits, L. V.  
Gurvich, 14 pp.

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No 2, 1957, pp 145-149.

ABC UCRL-Tr-707

OTR 62-10114

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Sci - Phys  
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Tolstoi, N. A.  
KINETICS OF INFRARED LUMINESCENCE OF COPPER OXIDE. I. THEORETICAL INTERPRETATION, tr. by B. W. Kevshinoff. 27 Aug 62, 16p. 7 refs.  
APL/JHU TG 230-T324  
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- I. Tolstoi, N. A.
- II. Title: Theoretical ..
- III. APL/JHU TG-230-T326
- IV. Applied Physics Lab., Johns Hopkins U., Silver Spring, Md.
- V. Contract NOw-62-0554-c

Trans. of Optika i Spektroskopiya (USSR) 1957, v. 2, no. 2, p. 216-219.

DESCRIPTORS: \*Copper compounds, Oxides, \*Infrared radiation, \*Luminescence, Theory, Photoconductivity.

Three possible interpretations are discussed of the anomalous time-temperature increase in the relaxation of Cu<sub>2</sub>O luminescence: (1) the effect of temperature on mobility, (2) the effect of the "heat barrier," and (3) the exciton mechanism of luminescence. The last is considered to be the most likely. (Author)  
(Physics, TT, v. 9, no. 3)

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Vol 3, No 5

NAL 110-111

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Calculation of a Thin Multilayer Plate and a One-<sup>5</sup>  
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by A. A. Vasil'kovskiy, 13 p.

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No 2, pp 229-235.

SLA 59-20508

Sci  
Mar 60  
Vol 2, No 12

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The Analytical Theory of Optical Properties of  
Multi-layer Dielectric Coatings, by P. G. Kard, 15 p.

RUSSIAN, per Optika i Spektroskopiya, 1957, Vol II,  
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OSMA 59-20506

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Sci  
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Kard, P. G.  
THEORY OF MULTILAYER COATINGS ON LENSES  
FOR INCREASING THE TRANSMITTANCE OF LIGHT  
[1962] 12p. 1 ref.  
Order from OTS or SLA \$1.60

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Trans. of Optika i Spektroskopiya (USSR) 1957, v. 2,  
no. 2, p. 245-253.

DESCRIPTORS: \*Coatings, \*Dielectric films, \*Optics,  
Light transmission, Reflection, Penetration, \*Lenses.

The previous theory (Optika i Spektroskopiya 2: 236-244,  
1957; available in translation from OTS or SLA \$1.10  
as 62-10971) is used for calculating multilayer coatings  
for increasing the light transmittance of a lens. New  
simple formulas are derived and a graph is suggested.  
An optimum composition for 2-, 3-, and 4-layer  
coatings, which promote light transmittance over the  
(Physics--Optics, TT, v. 8, no. 5)      (over)

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Krylova, T. N. and Sokolova, R. S.  
ACHROMATIC REFLECTION-REDUCING FILMS.  
1961, 8p  
Order from CTT \$16.00 CTT-61P101

Trans. of Optika i Spektroskopiya (USSR) 1957, v. 2  
[no. 2] p. 251-252.

DESCRIPTORS: Photographic film, Films, Reflection, Reduction, Materials.

(Materials--Photographic, TT, v. 7, no. 12)

62-12978

- I. Title: Achromatic film
- I. Krylova, T. N.
- II. Sokolova, R. S.
- III. CTT-61P101
- IV. Columbia Technical  
Translations, White  
Plains, N. Y.

Office of Technical Services

Reflection of Light from a Liquid Surface and  
Its Connection with the Process of Crystallization  
by V. A. Kizel<sup>1</sup>, A. P. Stepanov, 13 p.

RUSSIAN, Izv. Optika i Spektroskopiya, 1957,  
Vol. XI, No. 2, pp 253-268.

SLA 59-20362

Sci  
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English Title Unknown, by P. A. Teplyakov.  
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NLL REF: 5413.2835 (MUL-tr-95)

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Sci - Phys

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On the Motion of Ions and the Contour of Their  
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I. The Directed Movement of Ions in a Discharge  
of Low Pressure, by Yu. M. Kagan, V. I. Perel,  
10 pp.

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Absorption Spectra of Benzene Crystals at  
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10 pp.

RUSSIAN, per, Optika i Spektroskopiya,  
Vol. IV, No 3, 1957, pp 317-322.

SLA 60-21768

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May 62

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The Effect of Deformation on the Spectra of  
Crystals, by V. L. Broude, O. S. Pakhomova, A. P.  
Prikhotko, 8 pp.

RUSSIAN, per. Optika i Spektroskopiya, Vol II,  
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ATS 26516R  
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Sci  
Jul 59

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Optical Surfaces, by F. I. Fedorov.

PHYSICS DEPARTMENT, UNIVERSITY OF CALIFORNIA, BERKELEY, CALIF. 94720

Sed. - Physics  
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Bell Telephone Lab

*to G. A. ...*

Effect of the Solvent on the Fluorescence and  
Absorption Spectra of Some Phthalimide Deri-  
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RUSSIAN, Tr. Opt. i Spektroskopiya, Vol 11,  
1957, pp 402-405.  
ANU 13-4657

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Temperature Distribution in a Spark Discharge Plasma  
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Analysis of Halogens in Non-Volatile Oxides, by M. P.  
Chaika, 14 pp.

RUSSIAN, per, Optika i Spektroskopija, Vol II, 1957,  
pp 421-425.

AEC CEA Tr R469

Reverse Trans Russian to French  
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Experiment on the Luminescence Field of Plastic  
Scintillators With Triphenylpyrene on Tempera-  
ture, by I. M. Naumov, 11 pp.

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ABC Tr 3568

Sci - Phys

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Optics of Magnetic Crystals. III. Uniaxial and  
Uniafractive Magnetic Crystals, by F. I. Fedorov.

RUSSIAN, part, Optika i Spektro, Vol. III, No. 4, 1957.  
pp 524-529.

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Sci - Physics  
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Luminescence Yield of Scintillators in Plastic Material  
with Triphenylpyrazoline as a Function of Temperature,  
by I. M. Rozman, 17 pp.

RUSSIAN, per, Optika i Spektroskopiya, Vol II, 1957,  
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ANCCRA Tr R381

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I. M. Roman, 8 pp.**

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**AEC Tr 3571**

**Sol. - Phys**

**May 59**

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Some Problems Of Spectrophotometry Of Light-  
scattering Media by A.P. Ivanov.

RUSSIAN, per, Optika i Spektroskopiya, Vol II,  
No 4, 1957, 524-529.

CSIRO Tr 4096

Oct. 62

Device for Observing Anomalous Dispersion in  
Rapid Processes, by A. M. Shikhtin, V. S. Egorov.

RUSSIAN, per. Optika i Spektroskopia, Vol II,  
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Navv Tr 3457/APL 345

Sci - Ingr  
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The Structure of Absorption Bands of Liquid  $H_2O$ ,  
 $D_2O$  and  $HDO$  Determined by the Structure of their  
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AJC 71: 773

Sci - Chem  
Feb 59

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Theory of Impurity Light Absorption in Molecular Crystals by E. I. Rashba, 12 pp.

RUSSIAN, per, Optica i Spektroskopiya, Vol. II, 1957, pp. 568-577.

AEC-tr-5967

Sci - Phys  
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Structure of Alkali-Halide Phosphors  
and Mechanism of Luminescence Process,  
by I. M. Shamovsky, et al, 6 pp.

RUSSIAN, per, Optika i Spektroskopiya,  
Vol XX, 1957, pp 599-605.

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Sci - Chem  
Nov 61

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Atomic Absorption and Luminescence Centers in  
Alkali Metal Halide Phosphors Activated by Heavy  
Metal Ions and Their Formation Under the Effect  
of Hard Radiation, by H. L. Kats.  
RUSSIAN, per, Optika i Spektroskopiya,  
Vol 3, No 6, 1957, PP 602-609.  
Dept of Navy APL/JNU T-2168

Sci/Nucl Sci  
Nov 68

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Electrophotometric Investigations of Night Sky  
Brightness, by S. F. Rodionov, 16 pp. UNCLASSIFIED

RUSSIAN, no per, Optika i Spektroskopiya, Vol. II,  
No 5, Leningrad, May 1957, pp 606-615.

US JPRS/NY-L-26

Sci - Physics  
Mar 58

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TT-62-28870

Shklyarevskii, I.N. and Ryazanov, A.N.  
DISPERSION DE LA SAUTE DE PHASE DES PELLICULES MINCES D'ALUMINIUM (Dispersion of the Phase Jump in Thin Aluminum Films). 14p. 13refs.  
CNRS-XVIII 62.  
Order from O.T.S. ETC of CNRS \$1.60    TT-62-28870

- I. Shklyarevskii, I.N.
- II. Ryazanov, A.N.
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Trans. in French of Optika i Spektroskopiya (USSR) 1957, v.2, no.5, p.647-650.

DESCRIPTORS: \*Metal films, Aluminum, Zinc compounds, Sulfides, Phase studies, Spectroscopy.

(Physics -- Spectroscopy, TT, v. 11, no. 9)

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Double Refraction of Fluoride Films,  
by K. D. Sineinikov, et al, 6 pp.

RUSSIAN, par, Optika i Spektroskopiya,  
Vol III, No 5, 1957, pp 551-657.

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Sci - Phys  
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New Method of Measuring Spectra in an Atomic Beam  
by V. K. Granov, 4 pp.

RUSSIAN, per, Optika i Spaktroskopiya, Vol IX,  
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AEC TR 3508

Sci - Nuc Phys  
Feb 59

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Relative Quantities of the Pricipa; Tersm of the  
Diffusion and Cutting Series AL 1, by Yu. I. Ostrovski.

RUSSIAN, Optika i Spek, Vol ii, 1957, p 673.

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Listsa, M. P. and Tavelykh, N. G.  
OPTIQUE DES COUCHES FINES DEPHASAGE DANS  
LA REFLEXION DE LA LUMIERE PAR LES COUCHES  
MINCES D'ARGENT, DE GERMANIUM DE TELLURE  
ET DE SELINIUM (Optics of Thin Films. Dephasing  
in the Reflection of Light by Thin Films of Silver,  
Germanium, Tellurium, and Selenium) tr. by  
M. B. Do Trezvinsky. 28 Dec 59 [8]p. 15 refs. CEA  
Trans. no. R 794 (text in French).  
Order from OTS or SLA \$1.10 61-23770

- I. Listsa, M. P.
- II. Tavelykh, N. G.
- III. CEA-tr-R794
- IV. Commissariat à l'Énergie Atomique (France)

Trans. of Opt[ika] i Spektrosk[opiya] (USSR) 1957, v. 2,  
no. 5, p. 674-676.

DESCRIPTORS: \*Thin films, \*Optics, USSR, Phase  
studies, Light transmission, Reflection, Silver,  
Germanium, Tellurium, Selenium, Metal films.

178683

Office of Technical Services

(Physics--Optics, TT, v. 6, no. 6)

On Concentrations of Excited Atoms of Neon in  
a Discharge in a Hollow Cathode, by I. P.  
Bogdanova and Chen Gi-Tkhek.  
RUSSIAN, per, Optika i Spektroskopiya, 1957,  
Vol 2 No 6, pp 681-688.  
NLI RTS 2456 (On Loan or Purchase)

CFSTI IT 64-19965

Aug 65

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Absorption Spectra of Crystals of Plutonium Salts,  
by A. M. Lazrtovich, 11 pp.

RUSSIAN, part, Optika i Spektroskopiya, Vol II, 1957,  
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AEC Tr 3716

Sci - Phys

Sep 59

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Infrared Spectrum and Structure of the  
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Baldwin, et al. UNCLASSIFIED

RESEARCH, part, Optika i Spektroskopiya, Vol. III,  
No. 6, 1977, pp 710-716.

Co-Op Tr 184h  
Tr 497

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Doc - General Phys  
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device was constructed for investigating the infrared  
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